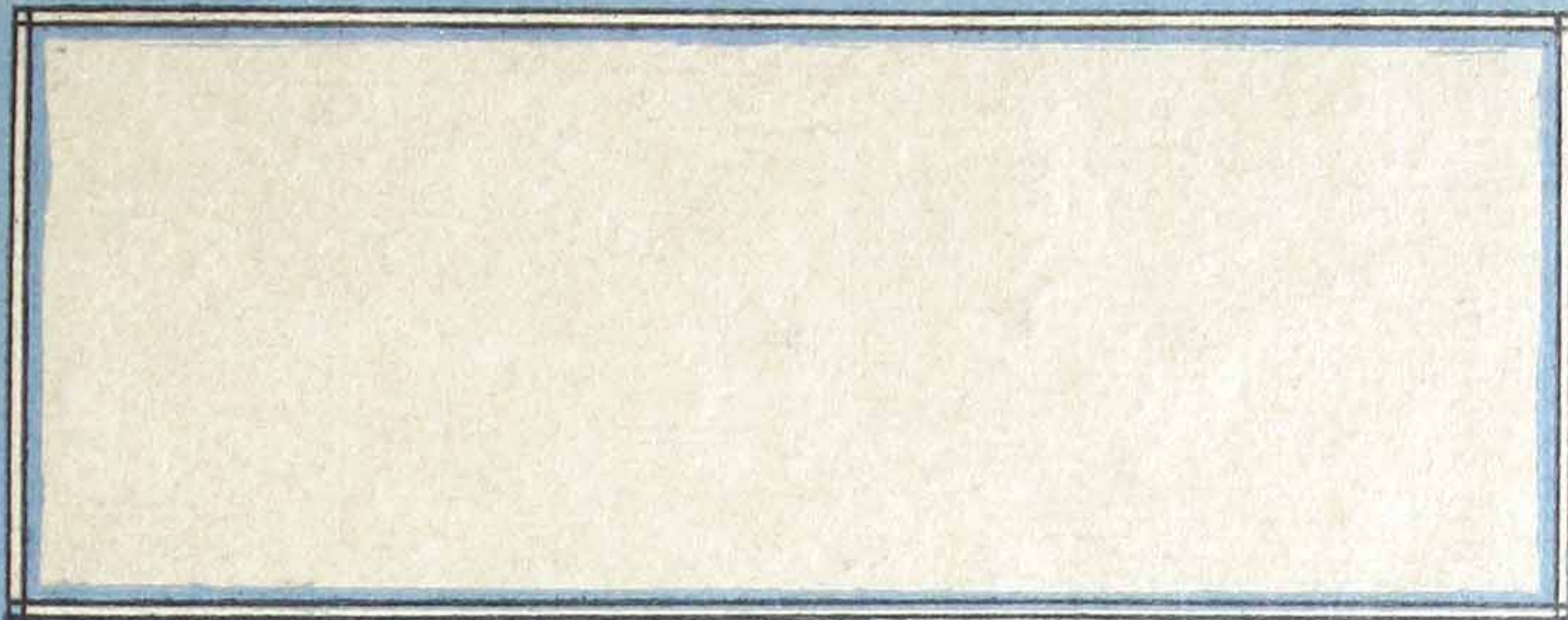


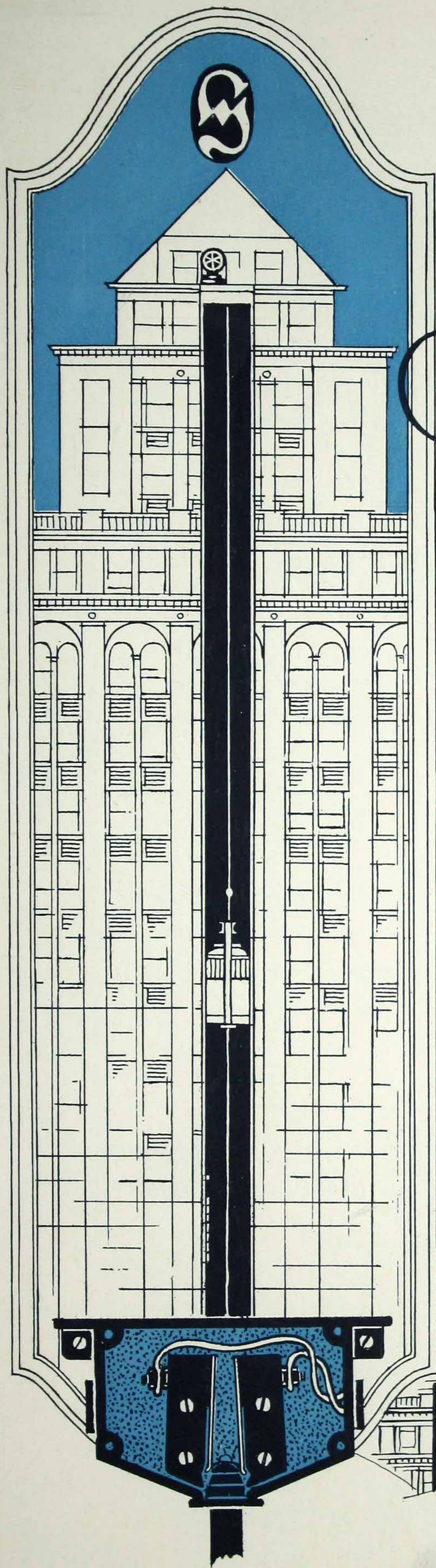


UTILITY
SAFETY-
APPLANCE
CORPORATION
NEW YORK

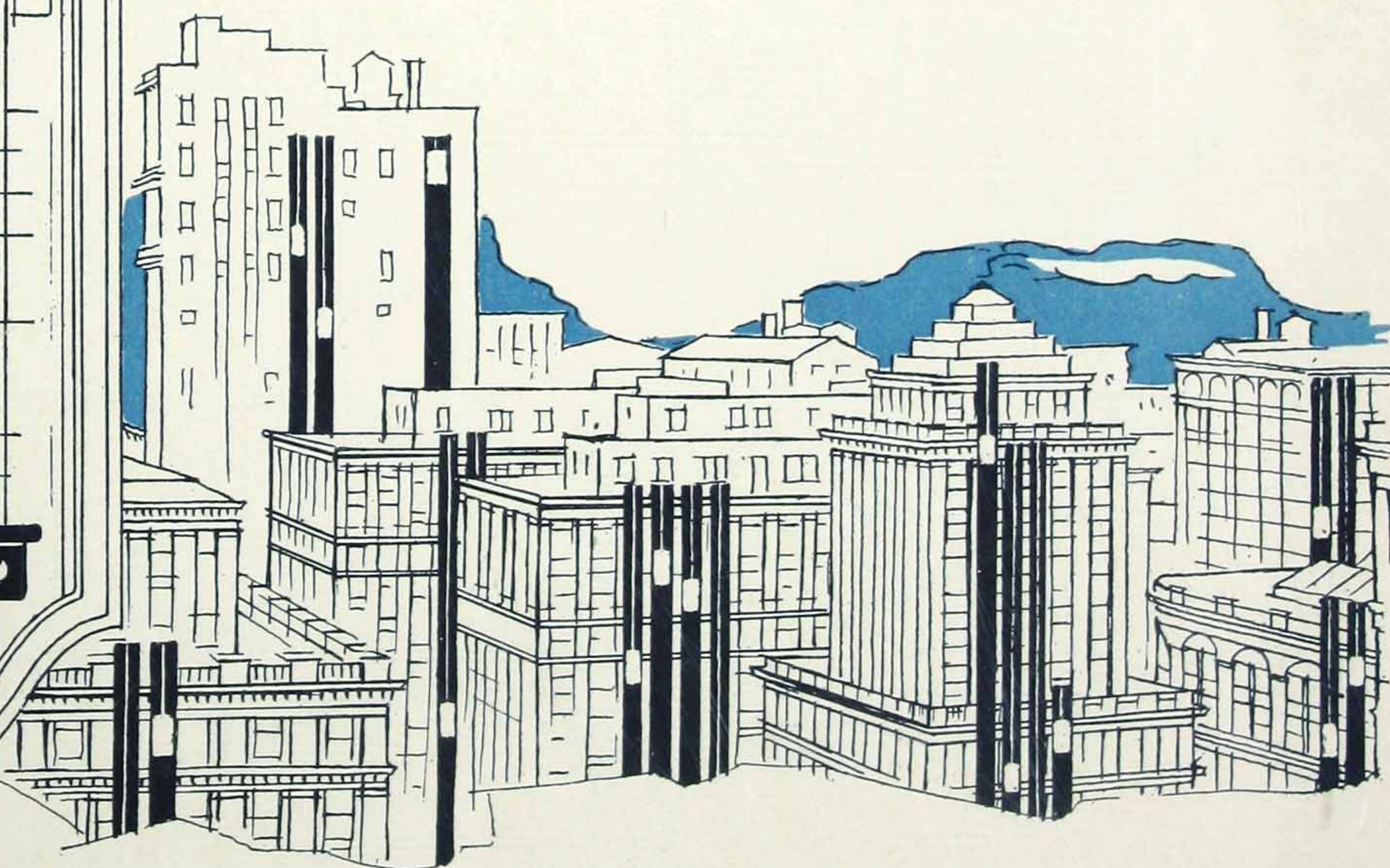
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CCA



Safeguarding Vertical Transportation



**BOY IS CRUSHED
TO DEATH BY
ELEVATOR**

**JURY AWARDS \$60,000
TO INJURED BOY ACTOR**
Nine-Year-Old Lad, Hurt in
Elevator, Testifies. From
Wheel C

**20-Story Fall Kills
Yale Club Employee**

Thomas Shippin, twenty-four years old, of No. 28 King street, a valet in the Yale Club, in Vanderbilt avenue, was instantly killed early today when he fell from the twentieth floor of the building. He was caught by the elevator and the landing at No. 6. He was killed today by a de-

**Elevator Crushes
Operator to Death**

Louis Shookoff, a seventeen-year-old errand boy, of No. 44 Pulaski street, Brooklyn, was killed this morning when he was caught between a descending elevator and the sill of the fourth landing at No. 67 Fifth avenue. Firemen of Hook and Ladder Company No. 72 plied axes, rams and crowbars for more than fifteen minutes before the youth's body was removed. He was dead.

**Girl Crushed to Death
in Elevator Shaft**

Sarah Meade, nineteen, a negro domestic, died in Knickerbocker Hospital last night of internal injuries received when she was crushed, a few hours earlier, between the floor of an elevator and the framework of the shaft door in the No. 236 West 100th street.

ELEVATOR KILLS WOMAN.
Victim Crushed Against Floor
When She Tries to Operate Car.

Mrs. Eva Cohen, fifty, was crushed to death late yesterday afternoon when she attempted to jump from a moving elevator car in the apartment house at No. 473 West 173rd street. Mrs. Cohen, returning to her apartment from a house, stepped into the elevator, which was open, and tried to operate the lever. She fell and the car closed on her. She was extricated by firemen and taken to Knickerbocker Hospital.

The Need



ON every floor danger grimly lurks at the elevator door, where a hundred kinds of accidents can and do happen. Scarcely an issue of the newspapers but contains some harrowing story about a serious accident in an elevator shaft entailing suffering, perhaps death, and undoubtedly law suits and big money losses.

The need is for adequate protection at the elevator doors. Practically every elevator accident can be traced to the lack of proper safety devices and equipment there.

Under no circumstances should it be possible to move elevators unless every elevator door is securely locked. Elevators must stand still when any door on their shafts is open.

When, and only when, that is insured, will vertical transportation be made really safe.



Schlesinger's

Safety

Interlock System



EXPRESS elevator---first stop, eighteenth!"—that's the American city.

"Wuxtree! Crushed in elevator shaft!"—that's the American city, too.

The need is for speed. But the need is even greater for safety.

The place where safety is most essential is at the elevator door. And an electro-mechanical door interlock system which, under all circumstances, will safeguard passengers, can make vertical transportation safe.

To exactly fill that need the Schlesinger Safety Interlock System has been perfected *over an experimental period of ten years*, and is now being rapidly installed.

This system comprises an entire equipment. Not only does it include a perfected electro-mechanical door interlock, but non-interference magnetic relays, the purpose of which is to make it impossible to operate the elevator *from anywhere* unless every door is securely locked.

The advantages of both are explained on the succeeding pages.

The Schlesinger Safety Inter-lock



THE problem of the inventor who would make vertical transportation safe for the millions is two-fold. His devices must be such as to "stand up" mechanically. And they must be such as to insure human cooperation without conscious human effort. One has but to imagine himself an elevator operator and closing the eighth door for the two hundredth time today to realize the necessity for the latter qualification in order to offset the result of deadly monotony.

The interlock, which is the heart of this system, is mechanical and electrical. It exactly meets both requirements mentioned.

Mechanically.

It consists of a durable steel bar bolt and of an equally substantial lock-box. The bar bolt is placed on the shaft side of the door. At the top of this bar is a steel ball-bearing which eliminates friction when it comes in contact with the lock box and facilitates easy operation.

The lock itself, mounted at the top of the door casing, has a frame of heavy metal and a cover plate equally substantial. The latter is so constructed that no one will be tempted to tamper with it. Inside are only three parts, two of them exact duplicates. These are two, reversible terminal blocks and an arc-interruptor.

At the instant that the door is completely shut against its casing, the ball-bearing at the end of the bar bolt will have been forced down a runway on the lock box and have snapped securely, an inch up, into the opening in the frame of the latter where it exactly fits.

The operation is equally efficient whether the door slides from left to right or right to left or be closed as a swinging door. It cannot possibly bound away from its casing without the bar bolt locking.

Wholly without considering the electrical phase, it is claimed for this inter-lock that it is mechanically perfect.



Electrically



At the instant the pyramid-shaped end of the bar-bolt snaps into the lock-box, it moves up the light-weight arc interruptor and forces itself firmly between two heavy copper contactors, thereby forming an electrical circuit through them and making it possible for the car to run.

Conversely, when the operator pulls down the bar-bolt, the electrical circuit is *at once* broken, the arc interruptor falls into place of its own weight between the terminals of the now open circuit and it is impossible to run the car.

In the usual installation, this lock box is called upon to handle a current of 110 volts, yet it has been tested by the Electrical Testing Laboratories, New York, and shown to be capable of handling 39,100 volts without the insulation breaking down. This represents a safety factor nearly three hundred and fifty-five times requirements, an important consideration.

In case of an extreme emergency, should the lock-box be flooded with water, the system is so devised that it eliminates all possibility of grounds in the interlocks or wiring.

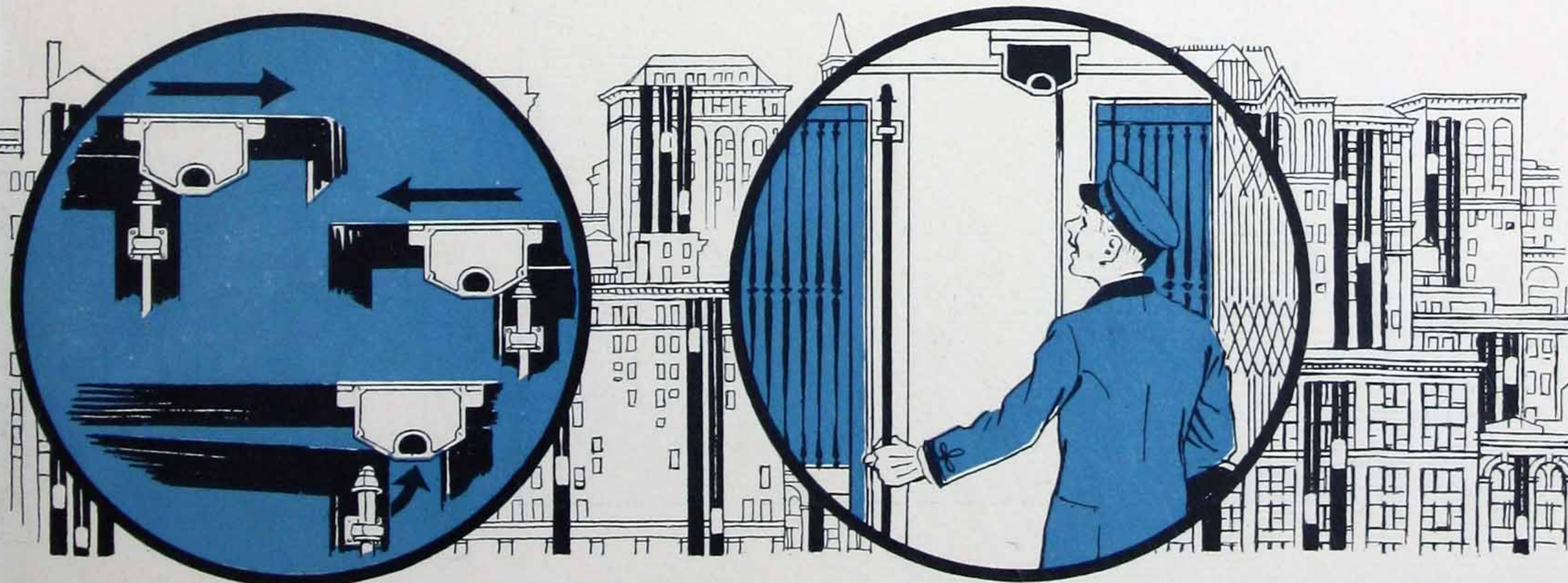
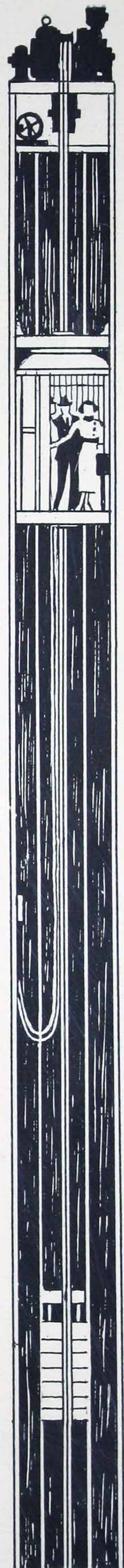
It is simple in design, compact in construction, durable and reliable in service, economical in first cost and upkeep, and, paramountly, it insures absolute safety under all circumstances to those who use the elevators.

Insuring Human Co-operation.

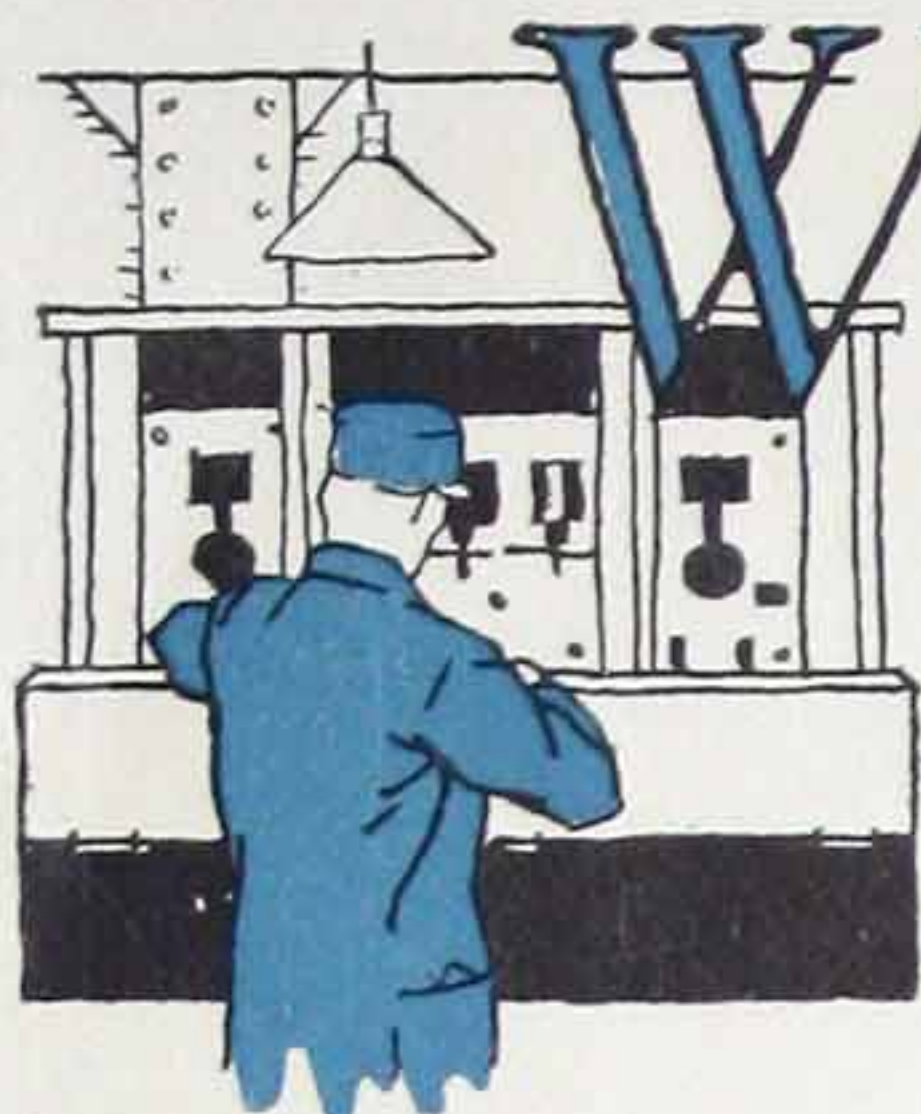
A big, outstanding feature about the Schlesinger Safety Inter-Lock is that it insures human cooperation because it does not demand it. The fact is that the operator can and does forget the interlock because it is a trouble-proof device. It requires not the slightest extra motion or thought on his part.

In Addition.

There are several other elements of safety which its inventors desired and which are attained through the Non-Interference Magnetic Relays, the brains of the system, described on the next page.



The Non-Interference Magnetic Relays



WITH most elevators there are two independent electrical circuits. One runs the lifting and lowering machinery proper. The other, operated by the controller in the car itself, simply provides the power for running the switchboard which, in turn, controls the main current and the motion of the car.

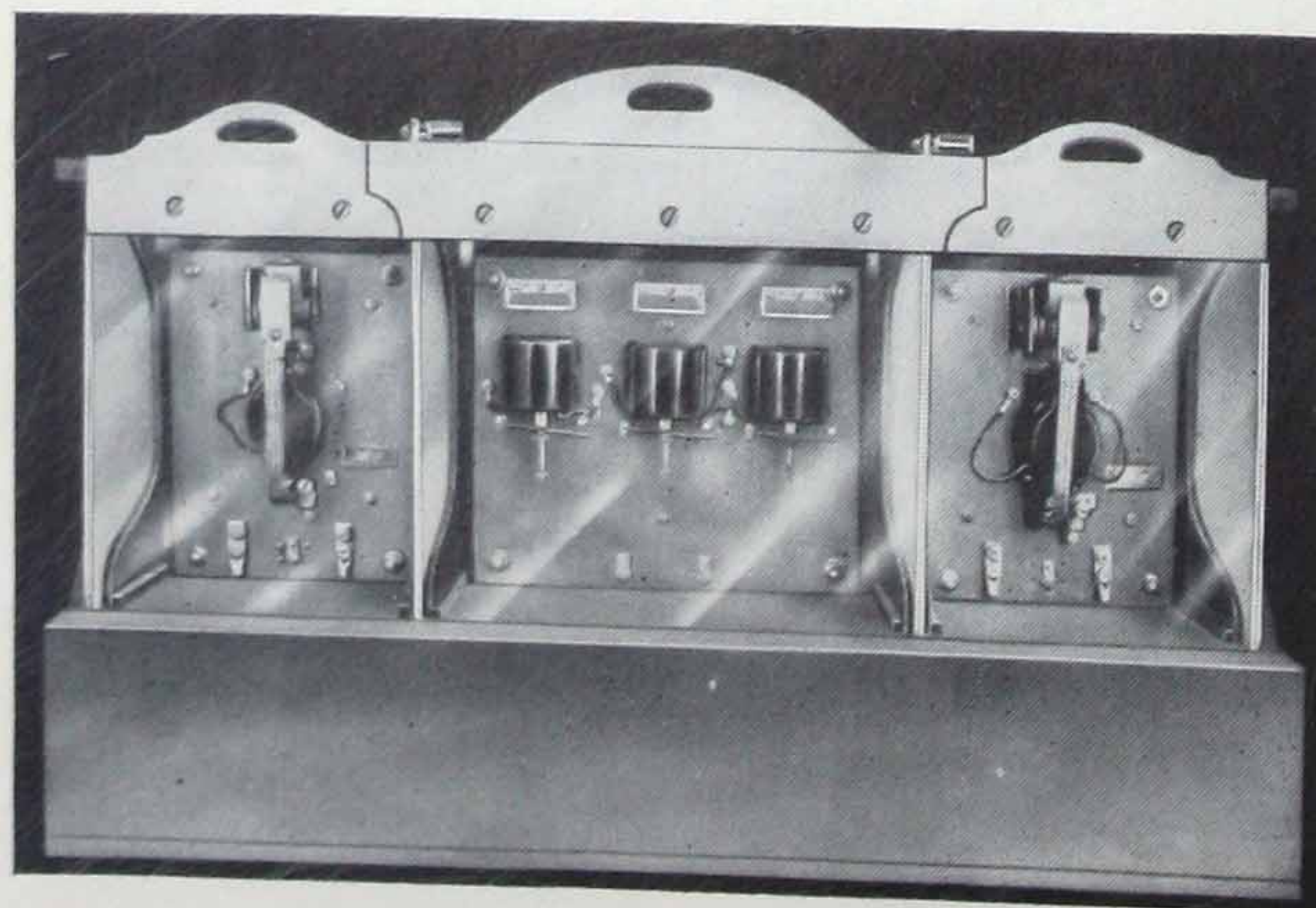
Other devices are wired up with such switch-board control circuits because it has always been thought that was sufficient. But the Schlesinger System has nothing at all to do with the switch-board control circuits. Instead, it "cuts in" on the main power circuit before it even reaches the switchboard.

These Non-Interference Magnetic Relays are placed in the motor room and have two important functions. They insure that, when any elevator door in the shaft is open, the entire elevator equipment shall be wholly "dead." There is no longer the slightest possibility of the machinery moving. Even though the magnet switches are pushed in by hand, the elevator cannot move.

The economy of this feature is important. Since the entire elevator system is positively disconnected from the power circuit the instant any door is open, there cannot possibly be any electro-leakage when the elevator is not in use.

The relays also make impossible the dangerous practice of advancing the controller in the car before actually closing the door. With this system installed, the control handle *must* be in neutral position when the door is closed. Then only can the power be applied.

The emergency release board is protected in many other ways, with the safety of the passengers in the car always in mind. To test the board, the engineer must first deliberately break two seals on the cover. When glass panels are removed from the front of the board, they too serve to break the entire electrical circuit.





The Emergency Release Switch

THE Schlesinger Emergency Release Switch was perfected to exactly fit the requirements of elevator car use. It was obvious that all efforts to secure safety for passengers would be of no avail if it were easily possible for the entire system of door interlocks to be switched off.

This release is tamper-proof. Once in place, it is impossible to throw out the interlocking system or even to open the box in any manner, without first breaking the glass. But, should an emergency arise, all that needs to be done is to turn the handle and the glass *must* be broken.

And, once the glass has been broken, the big button on the inside *must* be constantly pushed to release the interlocks. The instant the button is released, the interlocks are functioning again.

